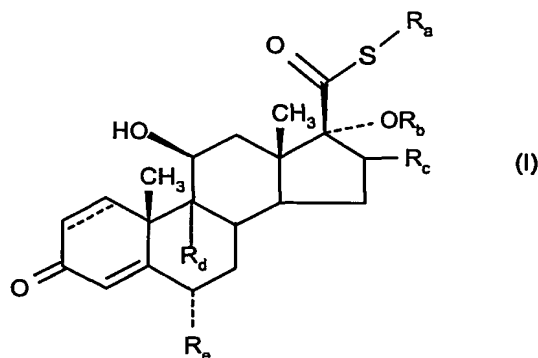


## CLAIMS

1. A pharmaceutical aerosol formulation comprising:

- 5 (i) a therapeutic effective amount of particulate medicament selected from a compound of formula (I)



or a salt, solvate or physiologically functional derivative thereof, wherein

10  $R_a$  represents  $C_{1-6}$  alkyl or  $C_{1-6}$  haloalkyl;

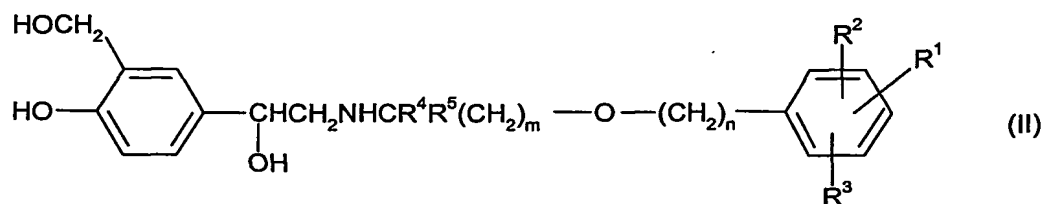
$R_b$  represents  $-C(=O)$ -aryl or  $-C(=O)$ -heteroaryl;

$R_c$  represents hydrogen, methyl (which may be in either the  $\alpha$  or  $\beta$  configuration) or methylene;

$R_d$  and  $R_e$  are the same or different and each represents hydrogen or halogen; and

15  $\text{---}$  represents a single or a double bond

and / or a compound of formula (II)



20 or a salt, solvate or physiologically functional derivative thereof, wherein:

$m$  is an integer of from 2 to 8;

$n$  is an integer of from 3 to 11;

with the proviso that  $m + n$  is 5 to 19;

$R^1$  is  $-XSO_2NR^6R^7$

wherein X is  $-(CH_2)_p-$  or  $C_{2-6}$  alkenylene;

$R^6$  and  $R^7$  are independently selected from hydrogen,  $C_{1-6}$ alkyl,

$C_{3-7}$ cycloalkyl,  $C(O)NR^8R^9$ , phenyl, and phenyl ( $C_{1-4}$ alkyl)-,

or  $R^6$  and  $R^7$ , together with the nitrogen to which they are bonded, form a 5-, 6-, or 7-

5 membered nitrogen containing ring,

and  $R^6$  and  $R^7$  are each optionally substituted by one or two groups selected from halo,  $C_{1-6}$ alkyl,  $C_{1-6}$ haloalkyl,  $C_{1-6}$ alkoxy, hydroxy-substituted  $C_{1-6}$ alkoxy,  $-CO_2R^8$ ,  $-SO_2NR^8R^9$ ,  $-CONR^8R^9$ ,  $-NR^8C(O)R^9$ , or a 5-, 6- or 7-membered heterocyclic ring;

$R^8$  and  $R^9$  are independently selected from hydrogen,  $C_{1-6}$ alkyl,

10  $C_{3-6}$ cycloalkyl, phenyl, and phenyl ( $C_{1-4}$ alkyl)-; and

p is an integer of from 0 to 6;

$R^2$  and  $R^3$  are independently selected from hydrogen,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkoxy, halo, phenyl, and  $C_{1-6}$ haloalkyl; and

$R^4$  and  $R^5$  are independently selected from hydrogen and  $C_{1-4}$ alkyl with the proviso that

15 the total number of carbon atoms in  $R^4$  and  $R^5$  is not more than 4;

(ii) a propellant selected from the group comprising 1,1,1,2-tetrafluoroethane or 1,1,1,2,3,3,3-heterofluoro-n-propane and mixtures thereof; and

20 (iii) the surfactant [(7,7,8,8,8-pentafluorooctyl)oxy]acetic acid.

2. A pharmaceutical aerosol formulation consisting essentially of a compound of formula (I) and / or a compound of formula (II) as described in claim 1, a propellant selected from the group comprising 1,1,1,2-tetrafluoroethane or 1,1,1,2,3,3,3-heterofluoro-n-propane and mixtures thereof and the surfactant [(7,7,8,8,8-pentafluorooctyl)oxy]acetic acid.

3. A pharmaceutical aerosol formulation according to claim 1 or claim 2 in which the particulate medicament is 3-(4-[[6-((2*R*)-2-hydroxy-2-[4-hydroxy-3-(hydroxymethyl) phenyl]ethyl) amino)hexyl]oxy}butyl) benzenesulfonamide.

4. A pharmaceutical aerosol formulation according to claim 1 or claim 2 in which the particulate medicament is 6 $\alpha$ , 9 $\alpha$ -difluoro-17 $\alpha$ -[(2-furanylcabonyl)oxy]-11 $\beta$ -hydroxy-16 $\alpha$ -methyl-3-oxo-androsta-1,4-diene-17 $\beta$ -carbothioic acid S-fluoromethyl ester.

5. A pharmaceutical aerosol formulation according to claim 1 or claim 2 in which the particulate medicament is 3-(4-[[6-((2*R*)-2-hydroxy-2-[4-hydroxy-3-(hydroxymethyl)phenyl]ethyl) amino)hexyl]oxy}butyl) benzenesulfonamide in combination with 6 $\alpha$ , 9 $\alpha$ -difluoro-17 $\alpha$ -[(2-furanylcarbonyl)oxy]-11 $\beta$ -hydroxy-16 $\alpha$ -methyl-3-oxo-androsta-1,4-diene-17 $\beta$ -carbothioic acid *S*-fluoromethyl ester.
6. A pharmaceutical aerosol formulation according to any one of claims 1 to 5 in which the surfactant is present in the range 0.5% to 10%w/w relative to the medicament.
7. A pharmaceutical aerosol formulation according to any one of claims 1 to 6 in which the propellant is 1,1,1,2-tetrafluoroethane.
8. A process for the preparation of a pharmaceutical aerosol formulation according to any one of claims 1 to 7 which comprises dispersal of a compound of formula (I) and/or (II) as described in claim 1 and the chosen surfactant compound in the selected propellant in an appropriate container.
9. The use of a pharmaceutical aerosol formulation according to any one of claims 1 to 7 for the manufacture of a medicament for administration by inhalation for the treatment of respiratory disorders.
10. The use according to claim 9 in which the respiratory disorder is asthma or COPD.
11. A method of treatment or prophylaxis of respiratory disorders which comprises administering to a patient in need thereof a pharmaceutical aerosol formulation according to any one of claims 1 to 7.
12. A metered dose inhaler containing therein a pharmaceutical aerosol formulation according to any one of claims 1 to 7.
13. The use of the surfactant [(7,7,8,8,8-pentafluorooctyl)oxy]acetic acid in pharmaceutical aerosol formulations according to any one of claims 1 to 7 to enhance FPM and / or improve FPM stability of said formulations.

14. The use of the surfactant [(7,7,8,8,8-pentafluorooctyl)oxy]acetic acid in pharmaceutical aerosol formulations according to any one of claims 1 to 7 to reduce the variability in content uniformity of said formulations.